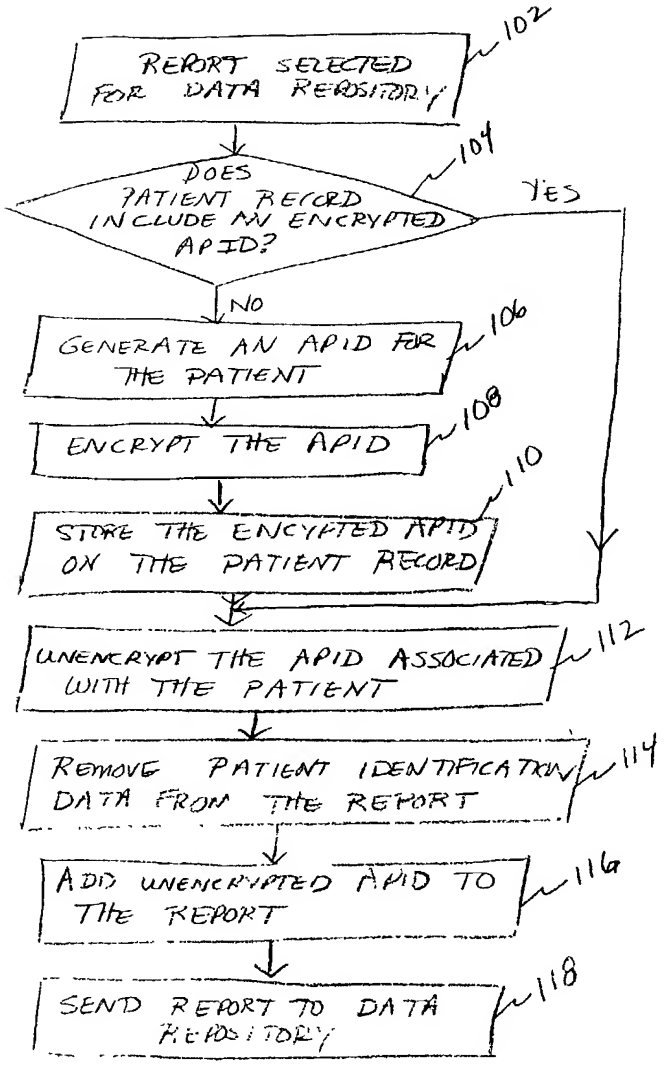
REPORT SELECTED FOR DATA REPOSITORY
102
DOES PATIENT RECORD INCLUDE AN ENCRYPTED APID?
104
YES
NO
GENERATE AN APID FOR THE PATIENT
106
ENCRYPT THE APID
108
STORE THE ENCYPTED APID ON THE PATIENT RECORD
110
UNENCRYPT THE APID ASSOCIATED WITH THE PATIENT
112
REMOVE PATIENT IDENTIFICATION DATA FROM THE REPORT
114
ADD UNENCRYPTED APID TO THE REPORT
116
SEND REPORT TO DATA REPOSITORY
118

FIG. 1

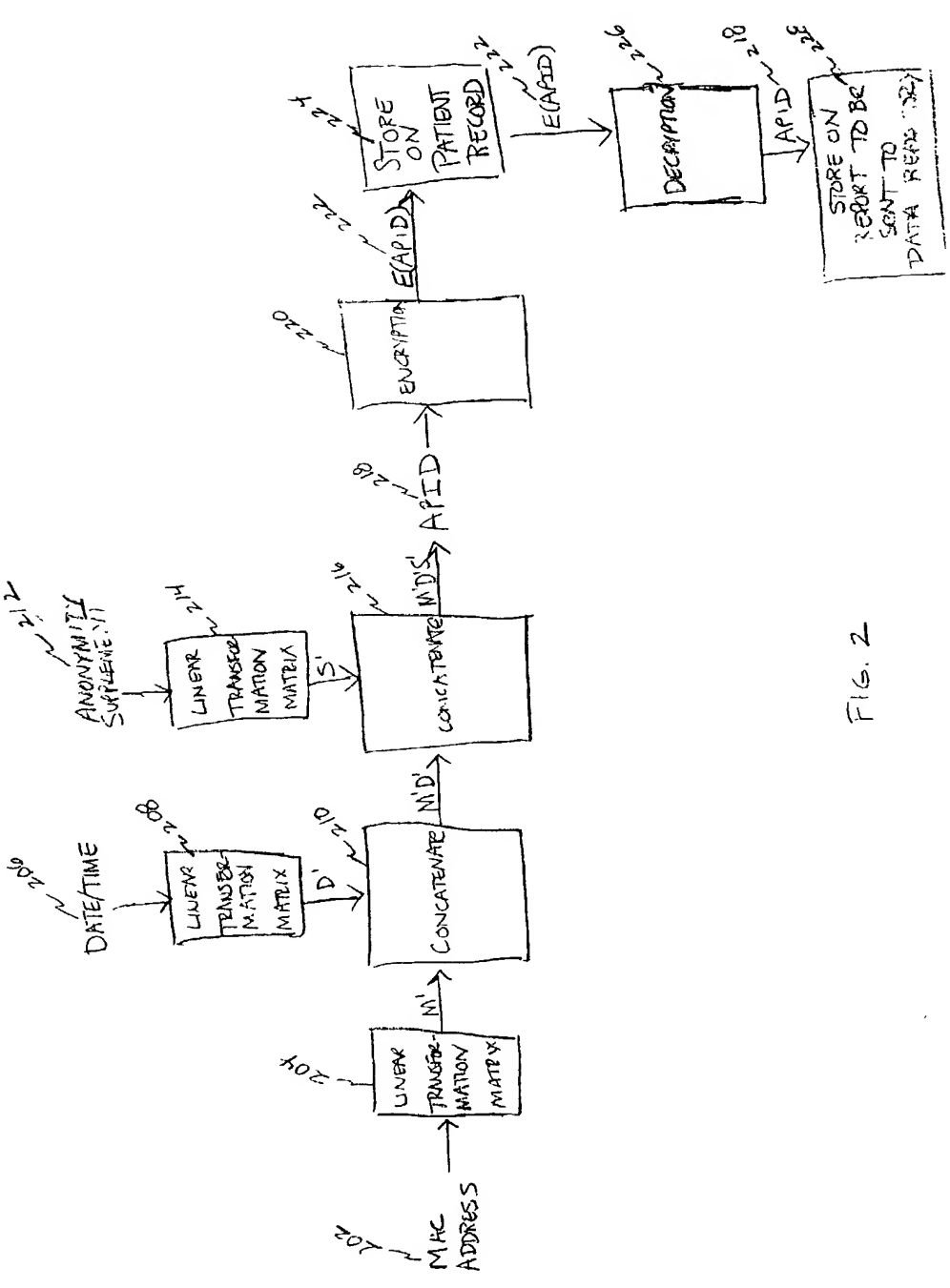
MAC ADDRESS
LINEAR TRANSFORMATION MATRIX
N'
DATE/TIME
LINEAR TRANSFORMATION MATRIX
D'
CONCATENATE
N'D'
ANONYMITY SUPPLEMENT
LINEAR TRANSFORMATION MATRIX
S'
CONCATENATE
N'D'S'
APID
ENCRYPTION
E(APID)
STORE ON PATIENT RECORD
E(APID)
DECRYPTION
APID
STORE ON REPORT TO BE SENT TO DATA REPOSITORY

FIG. 2

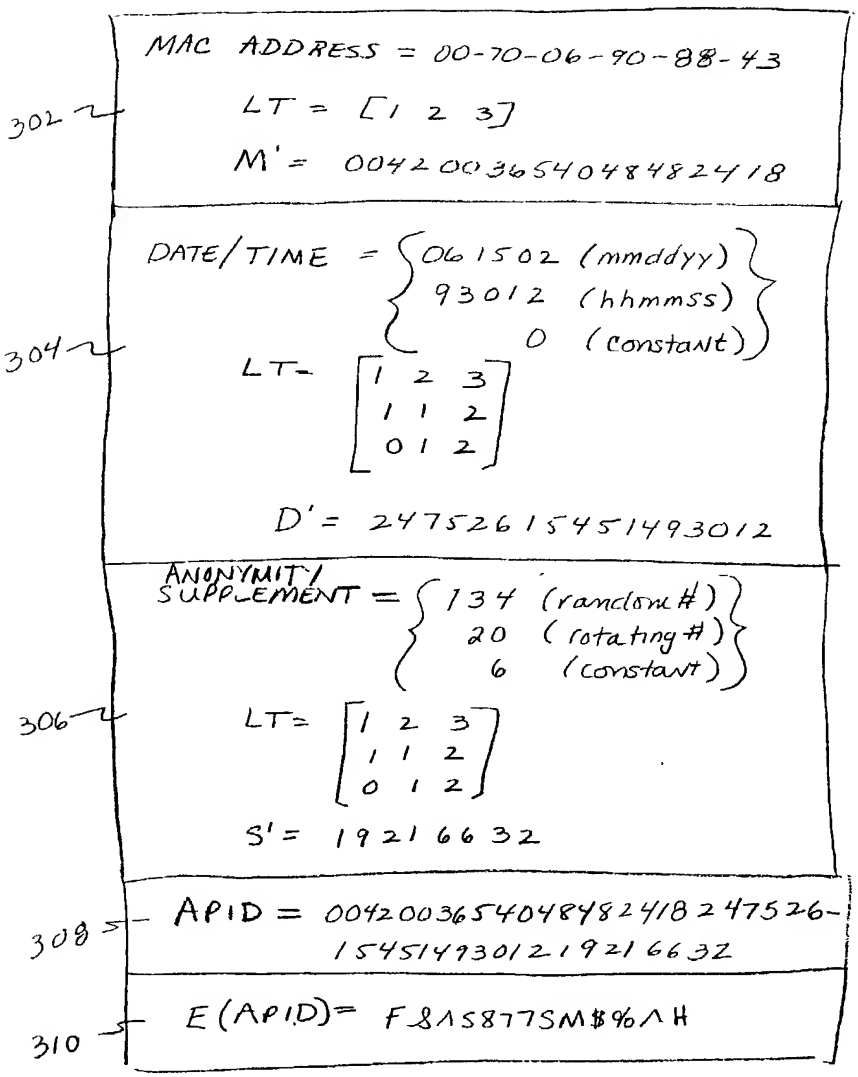
MAC ADDRESS = 00-70-06-90-88-43
302
LT = [1 2 3]
M' = 00420036540484824718
DATE/TIME = 061502 (mmddyy)
93012 (hhmmss)
0 (constant)
304
LT = [1 2 3; 1 1 2; 0 1 2]
D' = 247526154514930 12
ANONYMITY SUPPLEMENT = 134 (random #)
20 (rotating #)
6 (constant)
306
LT = [1 2 3; 1 1 2; 0 1 2]
S' = 19216632
APID = 00420036540484824718247526-
154514930121921663 2
308
E(APID) = F^5877SM%^H
310

FIG 3